

EEEEEEEEE	DDDDDDDDDD	TTTTTTTTTT
EEEEEEEEE	DDDDDDDDDD	TTTTTTTTTT
EEEEEEEEE	DDDDDDDDDD	TTTTTTTTTT
EEE	DDD	TTT
EEEEEEEEE	DDDDDDDDDD	TTT
EEEEEEEEE	DDDDDDDDDD	TTT
EEEEEEEEE	DDDDDDDDDD	TTT

\*\*FILE\*\*ID\*\*CHMUNDEL

D 14

CCCCCCCC CCCC CCCC  
HH HH MM MM UU UU NN NN DDDDDD DDDDDD EEEEEE EEEEEE LL LL  
CC HH HH MMMM MMMM UU UU NN NN DD DD DD DD EEEEEE EEEEEE LL LL  
CC HH HH MM MM UU UU NNNN NNNN NN NN DD DD DD DD EEEEEE EEEEEE LL LL  
CC HH HH MM MM UU UU NNNN NNNN NN NN DD DD DD DD EEEEEE EEEEEE LL LL  
CC HH HHHHHHHHHHHH MM MM UU UU NN NN NN NN DD DD DD DD EEEEEE EEEEEE LL LL  
CC HH HHHHHHHHHHHH MM MM UU UU NN NN NN NN DD DD DD DD EEEEEE EEEEEE LL LL  
CC HH HH MM MM UU UU NN NN NNNN NNNN DD DD DD DD EEEEEE EEEEEE LL LL  
CC HH HH MM MM UU UU NN NN NN NN DD DD DD DD EEEEEE EEEEEE LL LL  
CC HH HH MM MM UU UU NN NN NN DD DD DD DD EEEEEE EEEEEE LL LL  
CC HH HH MM MM UU UU NN NN NN DD DD DD DD EEEEEE EEEEEE LL LL  
CCCCCCCC CCCC HH HH MM MM UUUUUUUUUU NN NN DDDDDD DDDDDD EEEEEE EEEEEE LLLLLLLL LLLLLLLL  
CCCCCCCC CCCC HH HH MM MM UUUUUUUUUU NN NN DDDDDD DDDDDD EEEEEE EEEEEE LLLLLLLL LLLLLLLL

LL IIIII SSSSSSSS  
LL IIIII SSSSSSSS  
LL IIIII SS SS  
LL IIIII SS SS  
LL IIIII SSSSSS SSSSSS  
LL IIIII SSSSSS SSSSSS  
LL IIIII SS SS  
LL IIIII SS SS  
LL IIIII SS SS  
LL LLLLLL LLLLLL IIIII SSSSSSSS SSSSSSSS

\*\*F

```
1 0001 0 XTITLE 'EDT$CHMUNDEL - undelete'
2 0002 0 MODULE EDT$CHMUNDEL (
3 0003 0 IDENT = 'V04-000'
4 0004 0 ) =
5 0005 1 BEGIN
6 0006 1
7 0007 1 ****
8 0008 1 *
9 0009 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
10 0010 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
11 0011 1 * ALL RIGHTS RESERVED.
12 0012 1 *
13 0013 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
14 0014 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
15 0015 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
16 0016 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
17 0017 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
18 0018 1 * TRANSFERRED.
19 0019 1 *
20 0020 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
21 0021 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
22 0022 1 * CORPORATION.
23 0023 1 *
24 0024 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
25 0025 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
26 0026 1 *
27 0027 1 *
28 0028 1 ****
29 0029 1 *
30 0030 1 *
31 0031 1 ++
32 0032 1 FACILITY: EDT -- The DEC Standard Editor
33 0033 1
34 0034 1 ABSTRACT:
35 0035 1
36 0036 1 This module performs the undeletion of text associated
37 0037 1 with the change mode commands UNDC, UNDW, and UNDL.
38 0038 1
39 0039 1 ENVIRONMENT: Runs at any access mode - AST reentrant
40 0040 1
41 0041 1 AUTHOR: Bob Kushlis, CREATION DATE: Unknown
42 0042 1
43 0043 1 MODIFIED BY:
44 0044 1
45 0045 1 1-001 - Original. DJS 04-Feb-1981. This module was created by
46 0046 1 extracting the routine UNDELETE from the module CHANGE.BLI.
47 0047 1 1-002 - Regularize headers. JBS 04-Mar-1981
48 0048 1 1-003 - Replace call to edt$$tst_eob. STS 22-Sep-1982
49 0049 1 1-004 - Don't turn an undelete of an empty line into a noop at EOB. JBS 01-Dec-1982
50 0050 1 --
51 0051 1 !--
```

EDTSCHMUNDEL  
V04-000

EDTSCHMUNDEL - undelete  
Declarations

F 14  
16-Sep-1984 00:13:54  
14-Sep-1984 12:22:49  
VAX-11 Bliss-32 v4.0-742  
DISK\$VMSMASTER:[EDT.SRC]CHMUNDEL.BLI;1 Page 2  
(2)

EDT  
V04

```
53 0052 1 %SBTTL 'Declarations'  
54 0053 1  
55 0054 1 TABLE OF CONTENTS:  
56 0055 1  
57 0056 1  
58 0057 1 REQUIRE 'EDTSRC:TRAROUNAM';  
59 0496 1  
60 0497 1 FORWARD ROUTINE  
61 0498 1 EDT$UNDL;  
62 0499 1 ! Insert the contents of an undelete buffer  
63 0500 1  
64 0501 1 INCLUDE FILES:  
65 0502 1  
66 0503 1  
67 0504 1 REQUIRE 'EDTSRC:EDTREQ';  
68 0639 1  
69 0640 1  
70 0641 1 MACROS:  
71 0642 1  
72 0643 1 NONE  
73 0644 1  
74 0645 1 EQUATED SYMBOLS:  
75 0646 1  
76 0647 1 NONE  
77 0648 1  
78 0649 1 OWN STORAGE:  
79 0650 1  
80 0651 1 NONE  
81 0652 1  
82 0653 1 EXTERNAL REFERENCES:  
83 0654 1  
84 0655 1 In the routine
```

```
86 0656 1 %SBTTL 'EDT$SUNDL - undelete'  
87 0657 1  
88 0658 1 GLOBAL ROUTINE EDT$SUNDL (           ! Undelete  
89 0659 1   BUF,                                ! Address of the appropriate undelete buffer  
90 0660 1   LEN,                                ! Length of that buffer  
91 0661 1 ) =  
92 0662 1  
93 0663 1 !++  
94 0664 1 FUNCTIONAL DESCRIPTION:  
95 0665 1  
96 0666 1 Insert the contents of an undelete buffer and move to whichever end.  
97 0667 1  
98 0668 1 FORMAL PARAMETERS:  
99 0669 1  
100 0670 1 BUF          the address of the undelete buffer. Its first character is  
101 0671 1  
102 0672 1  
103 0673 1 LEN          the length of the buffer.  
104 0674 1  
105 0675 1 IMPLICIT INPUTS:  
106 0676 1  
107 0677 1 NONE  
108 0678 1  
109 0679 1 IMPLICIT OUTPUTS:  
110 0680 1  
111 0681 1 NONE  
112 0682 1  
113 0683 1 ROUTINE VALUE:  
114 0684 1  
115 0685 1 1 is returned if successful, 0 otherwise.  
116 0686 1  
117 0687 1 SIDE EFFECTS:  
118 0688 1  
119 0689 1 NONE  
120 0690 1  
121 0691 1 --  
122 0692 1  
123 0693 2 BEGIN  
124 0694 2  
125 0695 2 EXTERNAL ROUTINE           ! Insert a string of characters which may include carriage returns  
126 0696 2   EDT$$INS_CHS,           ! Move left a character  
127 0697 2   EDT$$CS_EFT;  
128 0698 2  
129 0699 2 EXTERNAL  
130 0700 2   EDT$$A_WK_LN : REF LIN_BLOCK,  
131 0701 2   EDT$$Z_EOB_LN;  
132 0702 2  
133 0703 2 LOCAL  
134 0704 2   DIR,  
135 0705 2   RLEN,  
136 0706 2   BUF_POINT;  
137 0707 2  
138 0708 2   RLEN = .LEN;  
139 0709 2 !+  
140 0710 2 | Check for special case of entering an unnecessary carriage return  
141 0711 2 | at the end of the buffer.  
142 0712 2 !-
```

```

143 0713 2
144 0714 3 IF ((.EDTSSA_WK_LN EQLA EDT$$Z_EOB_LN) AND !
145 0715 3 (.RLEN GTR T) AND
146 0716 3 (CH$RCHAR (CH$PTR (.BUF, .RLEN)) EQL ASC_K_(R))
147 0717 2 THEN
148 0718 2 RLEN = .RLEN - 1;
149 0719 2
150 0720 2 BUF_POINT = CH$PTR (.BUF);
151 0721 2 ;+ Get the direction indicator.
152 0722 2 ;- DIR = CH$RCHAR_A (BUF_POINT);
153 0723 2
154 0724 2 IF (EDT$$INS_CHS (.BUF_POINT, .RLEN) EQL 0) THEN RETURN (0);
155 0725 2
156 0726 2 ;+ If the delete was a forward one, position to the beginning of the
157 0727 2 string we just inserted.
158 0728 2 ;-
159 0729 2 ; If the delete was a forward one, position to the beginning of the
160 0730 2 string we just inserted.
161 0731 2 ;-
162 0732 2
163 0733 3 IF (.DIR NEQ DIR_BACKWARD)
164 0734 2 THEN
165 0735 2
166 0736 2 DECR I FROM .RLEN - 1 TO 0 DO
167 0737 2 EDT$$CS_LEFT ();
168 0738 2
169 0739 2 RETURN (1);
170 0740 1 END;

```

! of routine EDT\$UNDL

```

.TITLE EDTSCHMUNDEL EDTSCHMUNDEL - undelete
.IDENT \V04-000\
.EXTRN EDT$$INS_CHS, EDT$$CS_LEFT
.EXTRN EDTSSA_WR_LN, EDT$$Z_EOB_LN
.PSECT _EDT$CODE,NOWRT, SHR, PIC.2

```

<pre> 52      08    AC  D0 00002 50 00000000G 00  9E 00006 50 00000000G 00  D1 0000D                   0E 12 00014 01          52  D1 00016                   09 15 00019 0D          04 BC42 91 0001B                   02 12 00020                   52  D7 00022 50          04 AC  D0 00024 1\$:  53          80  9A 00028                   05 BB 0002B 00000000G 00          02 FB 0002D                   50 D5 00034                   14 13 00036                   53 D5 00038                   0C 13 0003A                   07 11 0003C </pre>	<pre> .ENTRY EDT\$UNDL, Save R2,R3 MOVL LEN, RLEN MOVAB EDT\$\$Z_EOB_LN, R0 CMPL EDTSSA_WK_LN, R0 BNEQ 1\$ CMPL RLEN, #1 BLEQ 1\$ CMPB @BUF[RLEN], #13 BNEQ 1\$ DECL RLEN MOVL BUF, BUF_POINT MOVZBL (BUF_POINT)+, DIR PUSHR #^M&lt;R0,R2&gt; CALLS #2, EDT\$\$INS_CHS TSTL R0 BEQL 5\$ TSTL DIR BEQL 4\$ BRB 3\$ </pre>	0658 0708 0714 0715 0716 0718 0720 0724 0726 0733 0736
---	--	--

EDT\$CHMUNDEL  
V04-000

EDT\$CHMUNDEL - undelete  
EDT\$UNDL - undelete

I 14

16-Sep-1984 00:13:54  
14-Sep-1984 12:22:49

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[EDT.SRC]CHMUNDEL.BLI;1

Page 5  
(3)

0000000G 00  
F6  
50

00 FB 0003E 2\$: CALLS #0, EDT\$SCS\_LEFT  
52 F4 00045 3\$: SOBGEQ I 2\$  
01 D0 00048 4\$: MOVL #1, R0  
04 0004B RET  
50 D4 0004C 5\$: CLRL R0  
04 0004E RET

: 0737  
: 0739  
: 0740

: Routine Size: 79 bytes. Routine Base: \_EDT\$CODE + 0000

: 171 0741 1  
: 172 0742 1 !<BLF/PAGE>

EDT  
V04

EDT\$CHMUNDEL  
V04-000 EDT\$CHMUNDEL - undelete  
EDT\$UNDL - undelete  
: 174 0743 1 END  
: 175 0744 1  
: 176 0745 0 ELUDOM

J 14  
16-Sep-1984 00:13:54 VAX-11 Bliss-32 V4.0-742  
14-Sep-1984 12:22:49 DISK\$VMSMASTER:[EDT.SRC]CHMUNDEL.BLI;1 Page 6 (4)  
! of module EDT\$CHMUNDEL

EDT  
V04

#### PSECT SUMMARY

Name	Bytes	Attributes
_EDT\$CODE	79	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

#### Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
\$255\$DUA28:[EDT.SRC]EDT.L32;1	377	10	2	40	00:00.2
\$255\$DUA28:[EDT.SRC]PSECTS.L32;1	2	1	50	7	00:00.1

#### COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LIS\$:CHMUNDEL/OBJ=OBJ\$:CHMUNDEL MSRC\$:CHMUNDEL.BLI/UPDATE=(ENH\$:CHMU  
: NDEL)

: Size: 79 code + 0 data bytes  
: Run Time: 00:10.7  
: Elapsed Time: 00:13.6  
: Lines/CPU Min: 4181  
: Lexemes/CPU-Min: 11478  
: Memory Used: 70 pages  
: Compilation Complete

0132 AH-BT13A-SE  
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION  
CONFIDENTIAL AND PROPRIETARY

